



National Aeronautics and
Space Administration
Lyndon B. Johnson Space Center
Houston, Texas



Phasing the future

The Phase-1 Program is giving NASA and its astronauts the experience to live in space. Story on Page 3.



Hammer Award

White Sands Test Facility receives Vice President Al Gore's Hammer Award. Photo on Page 4.

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JSC Photo By Mark Sowa

Rep. James Sensenbrenner, R-Wis., talks with JSC employees in the Bldg. 3 cafeteria Monday. About 400 employees provides a standing room only audience for Sensenbrenner and Rep. Steve Stockman, R-Texas.

Chairman urges employees to deliver

On-time, on-budget space station key to solid future funding

The future chairman of the House of Representatives' Science Committee told standing room only audiences of JSC employees Monday that building the International Space Station on time and on budget is their best bet for ensuring a healthy space program in the future.

NASA's human space flight programs have stronger support in the current Congress than they have had for many years, Rep. James Sensenbrenner said, but NASA must prove it can deliver on its current programs before Congress will fund any future endeavors.

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"In order for NASA to regain the stature and esteem in the eyes of the public that it had after the Apollo program we have got to get one thing done right and on-time and on-budget and that's the space station," said Sensenbrenner, who currently is chairman of the House Subcommittee on Space and Aeronautics. "The next step beyond that I think has got to be the Moon and Mars."

Sensenbrenner visited JSC on Monday and took the opportunity to talk with employees in the Bldg. 3 cafeteria and the Bldg. 30 auditorium. He was accompanied by Rep.

Steve Stockman, R-Texas. Both sessions featured full audiences and lively question and answer sessions.

The Wisconsin Republican said that while the continuing resolution funding government operations runs out March 15, Congress intends to pass another that will carry the government through fiscal year and require no additional furloughs. He said that NASA's human space flight initiatives are enjoying widespread support in Congress today.

"The overall picture of Congress Please see **NEW**, Page 4

Payload lab grows perfect crystals, metals

Scientists worked hand-in-hand across the country to conduct a variety of scientific experiments on STS-75 this week and made microgravity science history with the first control of an experiment from a college campus.

Mission Specialist Jeff Hoffman also made history last week as he set a new record for most hours flown on a space shuttle. Five days, 21 hours and 1 minute into the flight, Hoffman surpassed the previous record of 975 hours and 18 minutes held by Astronaut Kathy Thornton. By the time *Columbia* is back on the ground, Hoffman will have logged more than 1,000 hours in space.

Last week, flight controllers confirmed the Tethered Satellite System satellite batteries had expired as ground stations in Florida and Bermuda were unable to acquire its signal last Friday as the satellite passed overhead. The crew was able to view the satellite on a variety of occasions, collecting data for scientists from instruments in *Columbia's* payload bay.

"We have been getting messages from the science team describing some of the work that they are doing," Hoffman said. "Data have been obtained and it looks very exciting. In a few months from now at the International Tether Conference when these results are presented, it should be pretty exciting."

In addition to supporting science activities, the crew also took some time last Saturday to take a call from the Houston Astrodome.

"Everyone here at the Houston Livestock Show and Rodeo wants to congratulate you and everyone at NASA on your current mission," said Announcer Bob Tallman. "There are about 57,000 rodeo fans here tonight and all of us take pride in the fact that the you are doing a great job."

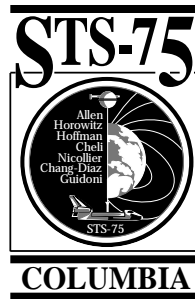
"We sure appreciate your good thoughts coming to us as we orbit the Earth," Hoffman said. "You know NASA is very interested in education of this nation's youth and we really appreciate the efforts of the Houston Livestock Show and Rodeo to develop scholarships and educational grants that have helped so many young people."

The United States Microgravity Payload got an extension day in space when mission managers decided to extend the flight by at least a day to support scientific investigations.

STS-75 Commander Andy Allen, Pilot Scott Horowitz, Mission Specialists Hoffman, Franklin Chang-Diaz, Claude Nicollier, Maurizio and Payload Specialist Umberto Guidoni said they were pleased with the decision.

"So much work and effort is put into getting a payload ready that if we have the opportunity to continue

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Gibson, Hawley take on new roles in Flight Operations

Astronauts Steve Hawley and Robert "Hoot" Gibson have taken on new roles in the Flight Crew Operations Directorate.

Hawley, a veteran of three shuttle missions before moving into management positions within NASA, has been returned to astronaut flight status and named to the crew of the second Hubble Space Telescope servicing mission. Gibson will replace Hawley as deputy director of Flight Crew Operations.

Hawley's mission, designated STS-82, is scheduled for launch in February 1997 on *Discovery*. Hawley's primary duty will

be to operate the shuttle's 50-foot robot arm. He was a member of the crew of STS-31 which first deployed Hubble in April 1990.



Hawley

Hawley, 44, will join astronauts Mark Lee, Greg Harbaugh, Steve Smith and Joe Tanner, all previously named as mission specialists on the flight. A mission commander and pilot will be named later.

In June 1990, Hawley left the astronaut corps to become associate director of Ames Research Center. He returned to JSC in August 1992

as deputy director of Flight Crew Operations. He joined the astronaut corps in January 1978

in the first group of astronauts selected specifically for the Space Shuttle Program. Hawley flew on shuttle missions STS-41D in 1984, STS-61C in 1986, and STS-31 in 1990. He has logged more than 412 hours in space.

Gibson became an astronaut in August 1979 and has flown five missions: STS-41B in 1984, STS-61C in 1986, STS-27 in 1988, STS-47 in 1992, and STS-71 in 1995. Gibson served as chief of the Astronaut Office from December 1992 to September 1994.

On STS-41B, Gibson was the pilot on the mission that deployed two Hughes commu-



Gibson

nations satellites. Gibson was the commander of STS-61C that deployed the SATCOM Ku

satellite and conducted experiments in astrophysics and materials processing. As commander of STS-27, Gibson and a five-man crew carried a Department of Defense payload. On STS-47, the 50th space shuttle mission, he commanded Spacelab-J, a cooperative venture between U. S. and Japan, and included the first Japanese astronaut. Most recently, Gibson commanded STS-71, the first

space shuttle mission to dock with the Russian Mir Space Station.

STS-76 crew prepares for third docking

Lucid to begin new era in space program

By Karen Schmidt

In less than two weeks, the U.S. will begin a two-year continuous presence aboard Russia's Mir Space Station that will prepare astronauts for living and working on the International Space Station.

Atlantis is expected to liftoff from Launch Pad 39B at 2:35 a.m. CST March 21 and dock with Mir about 43 hours after launch.

Atlantis and its crew of six—Commander Kevin Chilton, Pilot Rick Searfoss, Mission Specialists Linda Goodwin, Rich Clifford, Ron Sega and Mission Specialist/Cosmonaut Researcher Shannon Lucid—will remain docked for five days conducting a variety of joint sci-

entific experiments. *Atlantis* will carry logistics and hardware for the Mir 21 crew—Commander Yuri Onufrienko and Flight Engineer Yuri Usachev, who were launched to Mir on Feb. 21. Once *Atlantis* prepares to come home, Lucid will remain on Mir for more than four months.

"We are looking forward to successfully completing a rendezvous and docking so Shannon can join the Mir crew," Chilton said this week during the Terminal Countdown Demonstration Test in Florida. "One of the unique things about this flight is the total quantity of the equipment we are taking up. As we step forward into the space station era we are going to have to learn to transfer

large amounts of equipment efficiently and also bring back large amounts of equipment."

The Spacehab will house a number of experiments including the European Biorack experiment. Three days after docking, Godwin and Clifford, will conduct a six-hour space walk to attach experiments to Mir's Docking Module and to evaluate extravehicular activity hardware for the International Space Station. Chilton noted that STS-76 will feature the first operational use of the Simplified Aid For EVA Rescue, or SAFER, equipment. SAFER will be utilized because *Atlantis* will be hard docked to Mir and unable to rescue

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NASA Photo

In the Spacehab Payload Processing facility the STS-76 crew checks out the payloads that will fly in the microgravity laboratory. From left are, Mission Specialist Ron Sega, Commander Kevin Chilton, Mission Specialists Mike Clifford and Linda Godwin.